

(19) World Intellectual Property  
Organization  
International Bureau



13 JUL 2004



(43) International Publication Date  
4 March 2004 (04.03.2004)

PCT

(10) International Publication Number  
**WO 2004/018378 A3**

(51) International Patent Classification<sup>7</sup>: **C08K 5/00**,  
C08L 29/14, C08J 5/18, C08F 8/28, B32B 17/10

(21) International Application Number:  
PCT/US2003/007354

(22) International Filing Date: 11 March 2003 (11.03.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/363,943 12 March 2002 (12.03.2002) US

(71) Applicant (for all designated States except US): **E.I. DU PONT DE NEMOURS AND COMPANY** [US/US]; 1007 Market Street, Wilmington, DE 19898 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **RYMER, Donald, L.** [US/US]; 4233 School House Road, Little Hocking, OH 45742 (US). **READ, Nolan, K., III** [US/US]; 2 Chadwick Square, Vienna, WV 26105 (US).

(74) Agent: **DOBSON, Kevin, S.**; E.I. Dupont de Nemours and Company, Legal Patent Records Center, 4417 Lancaster Pike, Wilmington, DE 19805 (US).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:  
1 July 2004

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: LOW-COLOR PVB SHEET AND A PROCESS FOR MAKING SAME

(57) Abstract: The present invention is a low-color plasticized PVB sheet and a process for preparing the same. The sheet of the present invention yields a YID measurement of less than 12. A sheet of the present invention is useful for making glass laminates that are useful in cars, boats, trains, buildings, and display cases, for example.



**WO 2004/018378 A3**

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL SEARCH REPORT

JUL 2004

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference  AD6856PCT	<b>FOR FURTHER ACTION</b> <small>see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.</small>	
International application No.  PCT/US 03/07354	International filing date (day/month/year)  11/03/2003	(Earliest) Priority Date (day/month/year)  12/03/2002
Applicant  E.I. DU PONT DE NEMOURS AND COMPANY		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 03 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☐ None of the figures.

## INTERNATIONAL SEARCH REPORT

International Application No

US 03/07354

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C08K5/00 C08L29/14 C08J5/18 C08F8/28 B32B17/10

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C08K C08J C08F B32B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 432 124 A (MONSANTO CO) 12 June 1991 (1991-06-12) page 4, paragraph 1 - paragraph 3; table 1 ---	1,2,14
A	EP 0 130 872 A (SAINT GOBAIN VITRAGE) 9 January 1985 (1985-01-09) cited in the application claims 1,7-9; examples ---	1,13,14, 20
X	EP 0 102 502 A (HOECHST AG) 14 March 1984 (1984-03-14) page 6, paragraph 3; examples -----	1,4,14

☐ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*&\* document member of the same patent family

Date of the actual completion of the international search

14 April 2004

Date of mailing of the international search report

20/04/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Engel, S

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

US 03/07354

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0432124	A	12-06-1991	US 5013780 A	07-05-1991
			AT 134679 T	15-03-1996
			AU 630522 B2	29-10-1992
			AU 6676390 A	13-06-1991
			BR 9005875 A	24-09-1991
			CA 2030359 A1	09-06-1991
			DE 69025566 D1	04-04-1996
			DE 69025566 T2	01-08-1996
			EP 0432124 A2	12-06-1991
			JP 3170543 A	24-07-1991
			KR 9404094 B1	13-05-1994
			MX 171193 B	06-10-1993
			US 5013779 A	07-05-1991
EP 0130872	A	09-01-1985	FR 2547589 A1	21-12-1984
			AT 31193 T	15-12-1987
			BR 8402821 A	21-05-1985
			CA 1245397 A1	22-11-1988
			DE 3467896 D1	14-01-1988
			EP 0130872 A1	09-01-1985
			ES 8503692 A1	16-06-1985
			JP 1786435 C	10-09-1993
			JP 4073445 B	20-11-1992
			JP 60042402 A	06-03-1985
			US 4696971 A	29-09-1987
EP 0102502	A	14-03-1984	DE 3228076 A1	02-02-1984
			AU 1736383 A	02-02-1984
			BR 8304005 A	07-03-1984
			EP 0102502 A1	14-03-1984
			JP 59038251 A	02-03-1984
			ZA 8305480 A	25-04-1984